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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,408 11/06/2003		Timothy E. Bean	15436.176.1	8343
7590 05/14/2007 ERIC L. MASCHOFF WORKMAN NYDEGGER 1000 Eagle Gate Tower 60 East South Temple			EXAMINER	
			MCFADDEN, MICHAEL B	
			ART UNIT	PAPER NUMBER
Salt Lake City, UT 84111			2188	
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			05/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	,	Application No.	Applicant(s)			
Office Action Summary		10/702,408	BEAN ET AL.			
		Examiner	Art Unit			
		Michael B. McFadden	2188			
	The MAILING DATE of this communicatio					
Period fo		,,				
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPORTED IN THE MAILING THE WAILING THE MAILING T	NG DATE OF THIS COMMUNION (SER 1.136(a)). In no event, however, may a roon. period will apply and will expire SIX (6) MON statute, cause the application to become AB	CATION. eply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on	21 February 2007.				
2a)⊠	his action is FINAL . 2b) This action is non-final.					
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice un	ider <i>Ex parte Quayle</i> , 1935 C.D). 11, 453 O.G. 213.			
Disposit	ion of Claims					
4) 🖂	Claim(s) <u>1-30</u> is/are pending in the applic	ation.				
•	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	Claim(s) is/are allowed.					
	Claim(s) <u>1-30</u> is/are rejected.					
	Claim(s) is/are objected to.					
8)[_	Claim(s) are subject to restriction a	and/or election requirement.				
Applicat	ion Papers					
9)[The specification is objected to by the Exa	aminer.				
10)🛛	The drawing(s) filed on 21 February 2007	is/are: a)⊠ accepted or b)□	objected to by the Examiner.			
	Applicant may not request that any objection t	to the drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).			
_	Replacement drawing sheet(s) including the c	•	• • •			
. 11)	The oath or declaration is objected to by the	he Examiner. Note the attached	d Office Action or form PTO-152.			
Priority (ınder 35 U.S.C. § 119					
	Acknowledgment is made of a claim for fo ☐ All b)☐ Some * c)☐ None of:		3 119(a)-(d) or (f).			
	1. Certified copies of the priority docu					
	2. Certified copies of the priority docu		· · · · · · · · · · · · · · · · · · ·			
	Copies of the certified copies of the application from the International B	•	received in this National Stage			
* (See the attached detailed Office action for	, , , , , , , , , , , , , , , , , , , ,	received			
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A 44 m = h	*(a)					
Attachmen 1) Notice	et(s) te of References Cited (PTO-892)	A) Interview S	Summary (PTO-413)			
2) Notic	e of Draftsperson's Patent Drawing Review (PTO-94	(8) Paper No(s)/Mail Date			
	mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	5) Notice of I	nformal Patent Application —			

DETAILED ACTION

Status of Claims

1. Claims 1-30 are pending in the Application.

Response to Amendment

2. Applicant's arguments filed on 21 February 2007 have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-6, 9-11, and 13-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook et al. (herein Cook (US Patent No. 6,965,574)) and further in view of Leftwich (US Patent No. 6,356,256).
- 5. **Regarding Claim 1,** Cook discloses A method of analyzing network traffic on a network, the network traffic having been captured at a network monitoring computer during a period of time, the method comprising: at a user computer remote from the network monitoring computer, receiving data points corresponding to the captured

network traffic, the data points comprising: for the captured network traffic, start time, end time, total frames and total bytes; and information about sections of the captured network traffic, the information including start time, end time, number of frames in the section and number of bytes in the section. (See Cook: Figure 3)

Cook fails to disclose storing a histogram, including the data points, at the user computer.

Leftwich discloses storing a histogram, including the data points, at the user computer. (See Leftwich: Figure 4 and 3B)

Cook: Figure 3 shows the organization of network traffic. The number of packets, number of bytes, flow start and end time are all present in the network traffic information. Knowing the flow start time and end time gives you the total clock ticks of the capture. In Leftwich: Figure 4 the graph contains tabs for usage statistics and burst management. These would be relating specifically to network traffic. In Leftwich: Figure 3B it is shown in the picture that the graphical user interface is connected across a network to the data gathering mass storage device, therefore making it remote.

Cook and Leftwich are analogous art because they are from the same field of endeavor, presenting communication performance history data.

At the time of invention it would have been obvious to one of ordinary skill in the art to use the graphical display of Leftwich to display the network traffic data of Cook.

The motivation for doing so would have been to make information easily perceivable by a user. (Leftwich: Column 1, Lines 28-31)

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Therefore, it would have been obvious to combine the graphical display of Leftwich with the network traffic data collecting system of Cook for the benefit of making information easily perceivable by a user to obtain the invention as specified in claim 1.

- 6. Claim 2 is rejected using the same rationale as Claim 1.
- 7. Regarding Claim 3, Leftwich discloses presenting a user with a graphical user interface representation of the network traffic comprises: including a zoom window, the zoom window useful for highlighting a segment of the capture histogram, and representing the segment of the capture histogram in a zoom histogram. (See Leftwich: Figure 5A and 5B also See Leftwich: Column 5, Lines 44-51) The user clicks and drags to create a zoom window and the zoom is then displayed as a response to the user input.
- 8. Regarding Claim 4, Leftwich discloses including a data selection window useful for highlighting a segment of the zoom histogram; storing a first downloaded captured data file that includes sections corresponding to the segment of the zoom histogram highlighted by the data selection window; and displaying data frames corresponding to the highlighted segment of the zoom window. (See Leftwich: Column 5, Lines 37-42) The cursor is used to select a segment. Then the data points corresponding to the selection are shown in the histogram window, Figure 4, Element 36.
- 9. Claim 5 is rejected using the same rationale as Claim 4.
- 10. Claim 6 is rejected using the same rationale as Claim 1.
- 11. **Regarding Claim 9,** Cook discloses the histogram further comprising a listing and description of downloaded captured data files stored on the user computer, the

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method further comprising using the listing and description of downloaded captured data files to code portions of the capture histogram and the zoom histogram with a first indicator representing sections stored at the user computer. The system locates the files when it needs to access them for processing and displaying. Therefore, the system must contain indicators to locate the files it is using.

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- 12. Claim 10 is rejected using the same rationale as Claim 9.
- 13. Claim 11 is rejected using the same rationale as Claim 9.
- 14. Regarding Claim 13, Cook discloses downloading sections from the network monitoring computer that are not stored in downloaded captured data files at the user computer; and combining the downloaded sections with a downloaded captured data file that was previously stored at the user computer. The original files were taken from the network monitoring computer and used at the graphical user interface of the user computer to generate the histogram. If specific files or data is requested that is not at the user computer the network monitoring computer is still fully capable of providing data.
- 15. Regarding Claim 14, Cook discloses saving the histogram for later use. See Cook: Column 6, Lines 43-44. Cook discloses storing the data in persistent storage.
- 16. **Regarding Claim 15,** Cook discloses opening the histogram; determining if the histogram corresponds to network traffic stored on the network monitoring computer using timestamps; if the histogram corresponds to network traffic stored on the network monitoring computer, establishing a relationship between the network monitoring

computer and the user computer such that network traffic existing on the network monitoring computer may be downloaded to the user computer. See Cook: Column 6, Lines 43-44. Cook discloses storing the data in persistent storage. If the system can store the data it also will be able to open the stored files. The original files were taken from the network monitoring computer and used at the graphical user interface of the user computer to generate the histogram. If the saved file opens and specific files or data that is requested is not at the user computer the network monitoring computer is still fully capable of providing data.

- 17. Claim 16 is rejected using the same rationale as Claim 14.
- 18. Claim 17 is rejected using the same rationale as Claim 1.
- 19. Claim 18 is rejected using the same rationale as Claim 1.
- 20. Claim 19 is rejected using the same rationale as Claim 1.
- 21. Claim 20 is rejected using the same rationale as Claim 1.
- 22. Claim 21 is rejected using the same rationale as Claim 1.
- 23. Claim 22 is rejected using the same rationale as Claim 13.
- 24. Claim 23 is rejected using the same rationale as Claim 1.
- The Examiner takes Official Notice that a top-level folder for organizing data fields into a file structure, along with the naming of the files, folders, etc. that are associated with the file structure, would be obvious to a person of ordinary skill in the art. Many operating systems that have been used and that are used today include this function.
- 26. Regarding Claim 24 is rejected using the same rationale as Claim 23.

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- 27. Regarding Claim 25 is rejected using the same rationale as Claim 23.
- 28. Regarding Claim 26 is rejected using the same rationale as Claim 23.
- 29. Regarding Claim 27 is rejected using the same rationale as Claim 23.
- 30. Regarding Claim 28 is rejected using the same rationale as Claim 15.
- 31. Regarding Claim 29 is rejected using the same rationale as Claim 1.
- 32. Regarding Claim 30 is rejected using the same rationale as Claim 3.
- 33. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook et al. (herein Cook (US Patent No. 6,965,574)), Leftwich (US Patent No. 6,356,256), and further in view of Mazumder (US Patent No. 6,580,959).
- 34. **Regarding Claim 7,** Cook and Leftwich disclose presenting a user with a graphical user interface representation of the network traffic.

Cook and Leftwich fail to disclose applying a compression algorithm to at least a portion of the information in the histogram.

Mazumder discloses applying a compression algorithm to at least a portion of the information in the histogram.

Mazumder teaches using an efficient compression algorithm to enable fast transmission of a file. (Mazumder: Column 2, Lines 24-27)

Cook, Leftwich, and Mazumder are analogous art because they are from the same field of endeavor, data monitoring and processing.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to compress the histogram information of Cook and Leftwich with the compression algorithm of Mazumder.

The motivation for doing so would have been to enable efficient and fast transmission over a network. (Mazumder: Column 2, Lines 24-27)

Therefore it would have been obvious to combine the compression algorithm of Mazumder with the data monitoring and display system of Cook and Leftwich for the benefit of fast and efficient transmission over a network to obtain the invention as specified in claim 5.

- 35. Claim 8 is rejected using the same rationale as Claim 7.
- 36. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cook et al. (herein Cook (US Patent No. 6,965,574)), Leftwich (US Patent No. 6,356,256), and further in view of Jamieson et al. (herein Jamieson (US Patent No. 6,577,323)).
- 37. Regarding Claim 12, Cook and Leftwich fail to disclose using the listing and description of downloaded captured data files to color code portions of the capture histogram and the zoom histogram with a first color representing sections stored at the user computer, color coding portions of the capture histogram and the zoom histogram with a second color representing sections that were previously at the user computer, but that are not presently at the user computer; and color coding portions of the capture histogram and the zoom histogram with a third color representing sections that are not stored at the user computer or at the network monitoring computer.

Jamieson discloses using the listing and description of downloaded captured data files to color code portions of the capture histogram and the zoom histogram with a first color representing sections stored at the user computer, color coding portions of the capture histogram and the zoom histogram with a second color representing sections that were previously at the user computer, but that are not presently at the user computer; and color coding portions of the capture histogram and the zoom histogram with a third color representing sections that are not stored at the user computer or at the network monitoring computer.

See Jamieson: Column 6, Line 60 - Column 7, Line 3. Jamieson teaches the use of color coding a graph according to varying indicators. The indicators may representative of many things. An indicator of data location is already part of the data file (see rejection rationale of Claim 7). The data plot can then be color coded according to data location.

Cook, Leftwich, and Jamieson are analogous because they are from the same field of endeavor, data presentation.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the color coded background of Jamieson (Jamieson: Column 6, Line 64 - Column 7, Line 3) with the data plots of Cook and Leftwich.

The motivation for doing so would have been to easily provide additional information to the user and to possibly to provide navigation to more detailed information. (Jamieson: Column 6, Line 64 - Column 7, Line 3)

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Therefore it would have been obvious to combine the color coded background of Jamieson with the data plots of Cook and Leftwich for the benefit of providing additional information to the user and possibly providing navigation to more detailed information to obtain the invention as specified in Claim 12.

Response to Arguments

- 38. Applicant's arguments filed on 21 February 2007 have been fully considered but they are not persuasive
- 39. Regarding claims 1-6, 9-11, and 13-18, he Applicant contends that the Examiner has failed to disclose which elements correspond with the elements of the given claim. However, as previously stated in the rejections it is apparent to one of ordinary skill in the art that one of ordinary skill in the art would know which elements of a given figure would fulfill the claimed limitations. Furthermore, it is apparent to one of ordinary skill in the art that one of ordinary skill in the art would know that usage statistics and burst management would relate specifically to network traffic.
- 40. Regarding claim 2, the Applicant contends that the examiner has failed to specifically address each limitation of the claim by rejecting it using the same rationale as claim 2. However, the Examiner has considered all of the limitations of claim 2, and has determined that the further limitation of graphing byte density over time is rejected using the same rationale as the network traffic limitation of claim 1.

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41. Regarding claims 19 and 23, the Applicant contends that the examiner has failed to address specific claim limitations by rejecting claims 19 and 23 under similar rationale as claim 1. However, it would be apparent to one of ordinary skill in the art and one of the ordinary skill in the art would know what limitations of the claims apply to the aforementioned rejection. Also, the applicant attempts to illustrate this point by stating that claim 19 has the limitation of a histogram and that Figure 3 of Cook does not disclose a histogram. However, in the rejections Cook was never purported to disclose a histogram. In the rejection Leftwich discloses a histogram.

- 42. Regarding claim 23, the Applicant contends that there is no motivation to combine Almond with Leftwich and Cook in a manner that would result in the claimed invention. However, as previously stated in the rejection many operating systems that have been used and that are used today include this function. By including this function it adds organization and ease of use for the user. Therefore the motivation of additional organization and ease of use would have been apparent to one of ordinary skill in the art.
- 43. Regarding the requests for affidavits, the Applicant contends that the Examiner has failed to provide the requested affidavits. However, the Examiner is not relying upon personal knowledge. It would be apparent to one of ordinary skill in the art and one of ordinary skill in the art would know the aforementioned information.

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44. The Office would also like to note that the Applicant has maintained his previous arguments from the last response. Therefore the previous arguments and responses have been included.

- 45. Regarding Claim 1, Applicant contends that the Examiner has completely failed to identify which elements of Cook correspond with the elements and processes of claim 1. However, it would be known to one of ordinary skill in the art what elements of the Figure 3 of Cook fulfill the claimed limitations. Furthermore the Applicant contends that the Examiner is relying on personal knowledge as a basis for rejecting claim 1. However, the Examiner respectfully asserts that one of ordinary skill in the art would know that knowing the flow start time and end time gives you the total clock ticks of the capture. Also one of ordinary skill in the art would know in Leftwich: Figure 4 the graph contains tabs for usage statistics and burst management. These would be relating specifically to network traffic.
- 46. Regarding Claim 9, Applicant contends that the Examiner is relying on personal knowledge as a basis for rejecting claim 9. However, it would be known to one of ordinary skill in the art that the system locates the files when it needs to access them for processing and displaying. Therefore, the system must contain indicators to locate the files it is using.
- 47. Regarding Claim 13, Applicant contends that the Examiner is relying on personal knowledge as a basis for rejecting claim 13. However, it would be known to one of ordinary skill in the art that the original files were taken from the network monitoring computer and used at the graphical user interface of the user

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computer to generate the histogram. If specific files or data is requested that is not at the user computer the network monitoring computer is still fully capable of providing data.

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- 48. Regarding Claim 15, Applicant contends that the Examiner is relying on personal knowledge as a basis for rejecting claim 15. However, it would be known to one of ordinary skill in the art that if the system can store the data it also will be able to open the stored files. The original files were taken from the network monitoring computer and used at the graphical user interface of the user computer to generate the histogram. If the saved file opens and specific files or data that is requested is not at the user computer the network monitoring computer is still fully capable of providing data.
- 49. Regarding the motivation to combine Cook with Leftwich, Applicant contends that there is not motivation to combine the teachings of Leftwich and Cook. However, the Examiner respectfully asserts that Leftwich does indeed "make information easily perceivable by a user" as quoted in Column 1, Lines 28-31 of Leftwich. More specifically the Applicant contends that 'easily' is not defined, however Leftwich states that information is made easily perceivable to the user and therefore it is inherent in the reference. Furthermore, Applicant contends that there is an absence of evidence that Cook is deficient in terms of making information perceivable to the user. Cook makes no mention of making the information perceivable to the user and does not disclose a histogram. This is the reason that

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Leftwich was combined with Cook, to provide the teaching of a histogram that makes information easily perceivable by a user.

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- Regarding Claims 19 and 23, Applicant contends that these claims are not the same as each other nor are they the same as claim 1. However the Examiner notes that Claim 19 and 23 are rejected using the same rationale. It would be known to one of ordinary skill in the art what elements of the Figure 3 of Cook fulfill the claimed limitations. Furthermore, regarding claim 23 the limitations not disclosed using the rationale used to reject claim 1 are rejected using Official Notice.
- Regarding claim 23, Applicant contends that the Examiner has used personal knowledge in taking Official Notice. However, using Almond et al ((US Patent No. 6,112,024) herein after Almond) as an evidentiary reference, it is noted that in Figures 7A -7C Column 46, Lines 15-26 Almond teaches the top-level folder file structure. Also in Column 47, Lines 15 50 Almond discloses creating and naming folders and objects, or files.
- 52. Regarding the motivation to combine Cook and Leftwich with Mazumder,
 Applicant contends that there is not motivation to combine the teachings of Cook and
 Leftwich with Mazumder. Applicant implies that the motivation is poorly defined and an
 opinion of the Examiner. However, the motivation is cited directly from the
 reference and therefore is inherently taught by the reference. Furthermore,
 Applicant contends that there is an absence of evidence that Cook/Leftwich is deficient
 in terms of network transmission. Cook/Leftwich do not mention that they are

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proficient in network transmission, which is why the reference of Mazumder is brought in to provide efficient and fast transmission.

- Regarding claim 12, Applicant contends that the Examiner uses personal knowledge to reject claim 12. However, it would be known to one of ordinary skill in the art that an indicator of data location is already part of the data file and that the data plot can then be color coded according to data location.
- Applicant contends that there is not motivation to combine the teachings of Cook and Leftwich with Jamieson. Applicant implies that the motivation is poorly defined and an opinion of the Examiner. However, the motivation is cited directly from the reference and therefore is inherently taught by the reference. Furthermore, the Applicant contends that there is an absence of evidence that Cook/Leftwich is deficient in easily providing additional information or navigating to more detailed information. Cook/Leftwich do not mention easily providing additional information or navigating to more detailed information, which is why the reference of Jamieson is combined with Cook/Leftwich.
- 55. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

56. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael B. McFadden whose telephone number is (571)272-8013. The examiner can normally be reached on Monday-Friday 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sam Sough can be reached on (571)272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MBM 05/02/2007

5-10-07

Title: SELECTING AND MANAGING TIME SPECIFIED SEGMENTS FROM A LARGE CONTINUOUS CAPTURE OF NETWORK DATA Inventors: Timothy E. Bean, Gary Carter, Aloke Bordia, and Scott Peiger

Docket No.: 15436.176.1 / App. Serial No.: 10/702,408 / Response to Office Action: Sept 21, 2006

REPLACEMENT SHEET

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